IN THE CLAIMS

Claims 1-15 (Cancelled)

16. (Currently amended) A method of making an open pore polymeric membrane comprising:

providing a polymer or mix of polymers which do not include thermoplastic polyesters, and forming said polymer or mix of polymers into a predetermined shape, said polymer or mix of polymers containing from about 0.05 to about 4.5% by weight of a fluid that dissolves or swells the polymer or mix of polymers;

charging said polymer or mix of polymers with a gas;

foaming said polymer or mix of polymers at a temperature above the glass transition temperature of the polymer/gas mixture to create an open pore foam structure having substantially uniformly-sized pores; and

stabilizing the resulting open pore foam structure by cooling.

17. (Original) A method as claimed in claim 16 in which said fluid is infiltrated into said polymer or polymer mix.

18. (Original) A method as claimed in claim 16 in which said fluid is added to said polymer or polymer mix during manufacture.

19. (Original) A method as claimed in claim 16 in which said fluid comprises a gas or liquid.

20. (Original) A method as claimed in claim 19 in which said fluid comprises an organic liquid.

21. (Original) A method as claimed in claim 16 wherein after shaping, said polymer or polymer mix is charged with gas at a temperature below the glass transition temperature of the polymer/gas mixture, and is foamed by increasing the temperature to above the glass transition temperature of the polymer/gas mixture.

22. (Original) A method as claimed in claim 16 wherein after shaping, said polymer or polymer mix is charged with gas at a temperature above the glass transition temperature of the polymer/gas mixture, and is foamed by reducing pressure.

23. (Original) A method as claimed in claim 16 wherein said polymer or polymer mix is heated to a temperature above the glass transition temperature of said polymer or polymer mix, gas is charged into said polymer or polymer mix in an extruder, and upon extrusion said polymer or polymer mix is foamed due to the resulting drop in pressure.

24. (Original) A method as claimed in claim 16 wherein the charging gas is selected from the group consisting of air, noble gases, nitrogen, tetrafluoroethylene, fluoroform, hexafluoroethane, carbon dioxide, and mixtures thereof.

25. (Original) A method as claimed in claim 16 wherein the charging gas comprises carbon dioxide.

26. (Original) A method as claimed in claim 16 in which said polymer or polymer mix is saturated with the charging gas.

27. (Original) A method as claimed in claim 16 wherein the polymer or polymer mix is foamed at a temperature of between about 100° to about 200°C.

28. (Original) A method as claimed in claim 16 in which said fluid is selected from the group consisting of tetrahydrofuran, 1,2-dichloroethane, 1-methyl-2-pyrrolidone, and mixtures thereof.

29. (Currently amended) ~~A method as claimed in claim 16 in which said polymer is~~ A method of making an open pore polymeric membrane comprising:

providing a polymer or mix of polymers selected from the group consisting of polysulfone, polyethersulfone, polycarbonate, cellulose, a cellulose derivative, and mixtures thereof,

and forming said polymer or mix of polymers into a predetermined shape, said polymer or mix of polymers containing from about 0.05 to about 4.5% by weight of a fluid that dissolves or swells the polymer or mix of polymers;

charging said polymer or mix of polymers with a gas;

foaming said polymer or mix of polymers at a temperature above the glass transition temperature of the polymer/gas mixture to create an open pore foam structure having substantially uniformly-sized pores; and

stabilizing the resulting open pore foam structure by cooling.

30. (Original) An open-pore, surface fiber membrane produced by the process of claim 16.

31. (Original) An open-pore, hollow fiber membrane produced by the method of claim 16.

32. (Original) A membrane as claimed in claim 30 in which said membrane is asymmetrical.

33. (Original) A membrane as claimed in claim 31 in which said membrane is asymmetrical.

34. (Original) The use of a membrane made by the process of claim 16 for gas separation, hemodialysis, blood filtration, hemodiafiltration, plasmaphoresis, immunotherapy, microfiltration, or ultrafiltration.

35. (New) A method of making an open pore polymeric membrane comprising:

providing a polymer or mix of polymers selected from amorphous polymers and forming said polymer or mix of polymers into a predetermined shape, said polymer or mix of polymers containing from about 0.05 to about 4.5% by weight of a fluid that dissolves or swells the polymer or mix of polymers;

charging said polymer or mix of polymers with a gas;

foaming said polymer or mix of polymers at a temperature above the glass transition temperature of the polymer/gas mixture to create an open pore foam structure having substantially uniformly-sized pores; and

stabilizing the resulting open pore foam structure by cooling.

36. (New) The method as claimed in claim 1 wherein said polymer or mix of polymers contains less than about 4.0% by weight of said fluid.